DOCUMENT RESUME

ED 185 455 CG 014 302

AUTHOR Proefrock, David W.; Bloom, Robert
TITLE The Relationships between Verbal and Nonverbal Communication of Therapeutic Effectiveness.
PUB DATE 28 Aug 78
NOTE 18p.; Paper presented at the Annual Meeting of the American Psychological Association (Toronto, Ontario, Canada, August, 1978)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Behavior Rating Scales; *Counseling Effectiveness; *Counselor Performance; Counselors; *Relationship; Skill Analysis; *Therapists; *Verbal Communication

ABSTRACT

The relationship between a therapist's verbal and nonverbal communication of therapeutic effectiveness was investigated. In a design intended to eliminate many of the methodological problems which exist in this area of research, subjects (N=102) were asked to rate videotaped segments showing combinations of three different levels of both verbal and nonverbal therapist effectiveness. The rating scales used by subjects were the three Carkhuff scales for rating communication of respect, empathic understanding, and facilitative genuineness and a scale derived from the Microcounseling Skill Discrimination Scale. The results indicated that the relationship between verbal and nonverbal communication of therapeutic effectiveness may be additive in nature. (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED185455

The Relationships Between Verbal and Nonverbal Communication of Therapeutic Effectiveness

David W. Proefrock and Robert Bloom[1]

Memphis State University

Running head: Therapeutic Effectiveness

CG 014 302

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Robert Bloom

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The Relationships Between Verbal and Nonverbal Communication of Therapeutic Effectiveness

The research presented attempts to unify the disparate positions taken by Haase and Tepper (1972) and Graves and Robinson (1976) regarding the ratings of relative effectiveness of varying levels of verbal and nonverbal therapeutic effectiveness. This area of investigation is derived primarily from the work of Truax and Carkhuff (1967) and Carkhuff (1969). These authors identified three conditions which were significantly correlated with measures of therapeutic effectivenss. Those conditions are empathic understanding, communication of respect, and facilitative genuineness. Early work in the area of the therapist's verbal and nonverbal communication of the three conditions was performed by Shapiro and his associates (Shapiro, 1968; Shapiro, Foster, & Powell, 1968). The authors concluded that information is conveyed by verbal and nonverbal modes of communication and that the listener differentially combines the two types of information when interpreting a message.

Haase and Tepper (1972) attempted to determine the effects of presenting different levels of information via verbal and nonverbal channels. They presented to raters various combinations of three levels of verbal empathy interacting with several nonverbal positive and negative factors. The authors concluded that a compensatory model for the communication of therapeutic effectiveness best explained their data. The compensatory model

states that, to some extent, nonempathic messages in one mode of communication can be compensated for by empathic messages in the other mode. They found that the compensatory model did not apply, however, when the message in either mode of presentation was of low effectiveness.

Graves and Robinson (1976) in investigating the same problem used combinations of two levels of verbal and of nonverbal effectiveness. They found that when the verbal and nonverbal components of a therapist's message were inconsistent, that is, when the message in one component was of high effectiveness while the message in the other was low effectiveness, the client maintained a greater interpersonal distance between himself and the therapist and also rated the therapist's genuineness lower than when the components were consistent. Specifically, the results showed that while the high verbal/high nonverbal message was rated significantly higher, there were no significant differences in the subjects' ratings of the other three conditions.

The apparent failure of the compensatory model to hold at low levels of effectiveness may be explainable in light of these results. When one mode contains a low effectiveness message and the other a high effectiveness message, the inconsistency present in the total message must be high. A large inconsistency may be resolved by the raters lowering their ratings rather than by compensating the ratings by using an intermediate point. The question which remains, if this is the case, is at what point does

inconsistency between the verbal and the nonverbal components of a message cease to be compensatory and begin to show the negative effects of inconsistency?

For a number of reasons this question cannot be answered on the basis of the results of the two studies cited. First, the design of the Haase and Tepper (1972) study does not permit a direct comparison of the verbal and nonverbal levels of effectiveness. While there are three distinct verbal levels, the nonverbal levels are obscured by the fact that four separate behaviors are manipulated independently. Second, the Graves and Robinson (1976) study tested only the extremes of the verbal and nonverbal levels of effectiveness. Third, there has been no attempt in these studies (or in others in this general area) to insure that the levels of effectiveness used as independent variables are comparable. There is no ready way to assess whether content determined to be of high effectiveness in one study is equal or nearly equal to content determined to be of high effectiveness in another study.

The purpose of this study was to investigate the compensatory model proposed by Haase and Tepper (1972) using an easily distinguishable range of both verbal and nonverbal effectiveness and to further clarify the findings reported by Graves and Robinson (1976). The design employed in this study permitted investigation of the compensatory model over a range of three distinct levels of both verbal and nonverbal effectivenss. Thus, it is a more complete

design than that used by Graves and Robinson (1976), yet more straightforward and easily interpretable than that used by Haase and Tepper (1972). In addition, the levels of effectiveness in both modes of presentation were confirmed in a pilot investigation to be significantly different in the desired direction.

Method

The design employed was a two-way factorial with repeated measures on each factor. The independent variables were the therapist's verbal communication of the therapeutic conditions, which was divided into high, medium, and low effectiveness; and the therapist's nonverbal communication of the therapeutic conditions, which was also divided into the same three levels. The combination of each of the three levels of the verbal and the nonverbal modes of communication can be produced on a matrix of condition combinations. Cell 11, then, indicates the low nonverbal/low verbal condition; Cell 21 the low nonverbal/medium verbal, and so on. The nine combinations of each level of the two variables were presented to the subjects in the form of 30-second videotaped exchanges between actors portraying a "therapist" and a "client". The segments consisted of the therapist's varied verbal responses and postures to a standardized client statement.

Insert Table 1 about here

Subjects for the study were 102 introductory psychology students. The sample included 78 females and 34 males. Subjects were asked to rate the therapist's effectiveness using four different rating scales which served as dependent measures for the study. The rating scales were the three Carkhuff (1969) scales for rating communication of respect, empathic understanding, and facilitative genuineness. An additional scale of overall therapist effectiveness which was derived from the Microcounseling Skill Discrimination Scale (Lee, Zingle, Patterson, Ivey, & Haase; 1976) was also used. Each subject saw all nine of the videotaped segments which were presented in a partially counterbalanced order which controlled for both position and sequence effects in the presentation (Williams, 1949).

Results

The means and standard deviations of the subjects' ratings on each of the dependent measures is reproduced in Table 2.

Insert Table 2 about here

A two-way analysis of variance with repeated measures showed both main effects and interactions to be significant ($p < .001$) for all four dependent measures. Additional one-tailed t-tests were used to test for significant differences between the individual cell means in the matrix. The results of these t-tests are presented in Table 3. The results supported the

Insert Table 3 about here

predictions of the compensatory model only in that the cells which contained low effectiveness components (11, 12, 13, 21, and 31) were found to be rated significantly below ($p < .001$) the cells which did not contain low effectiveness components (22, 23, 32, and 33). The compensation effect did not occur in Cells 23 and 32 as was predicted. Cells 23 and 32 were not found to be rated significantly higher than Cell 22 on any of the dependent measures. The compensation effect did occur, however, in Cells 13 and 31, which were rated significantly higher ($p < .001$) than Cell 11 on all four dependent measures. The compensatory model predicted that compensation would not take place when low effectiveness messages were involved. In addition to going beyond the predictions of the compensatory model, this finding also partially contradicts the results of the Graves and Robinson (1976) study which found no differences in the ratings of the low/low, low/high, and high/low conditions. The results do replicate the inconsistency findings in that Cell 33 was found to be rated significantly higher ($p < .001$) than Cells 11, 13, and 31 on all four dependent measures.

Discussion

The results of this study, then, seem to support the concept of compensation, but not as proposed by Haase and Tepper (1972).

Compensation was found to occur even when low effectiveness components were involved and not to occur with the medium and high effectiveness components. The inconsistency effects reported by Graves and Robinson (1976) did not seem to be present in this study. As previously noted, the fact that these results are incompatible with those found in previous studies may be due to differences in design and in stimulus materials. There is no way of determining the relative effectiveness of the stimulus materials used in the different investigations.

It is possible, however, to explain these results with a simple additive model which may have applications in the explanation of the relationship between verbal and nonverbal communications found in other studies. For example, if in this study the low effectiveness condition is assigned the numerical value of zero, with the medium condition having an assigned value of two, and the high effectiveness condition a value of three (these values are arbitrary, but do correspond to the results of the pilot investigations in which the levels were confirmed), the resulting matrix of added values reflects the exact order in which the cell were rated by the subjects on all four dependent measures. A matrix of predicted values resulting from the additive model is presented in Table 4.

Insert Table 4 about here

Values can also be assigned to the conditions used by Graves and Robinson (1976) which will reflect their pattern of results.

The design of the Haase and Tepper (1972) study, however, does not permit an application of the additive model.

The proposed additive model is much simpler, more straightforward, and more parsimonious than either the compensatory model or the inconsistency findings. It explains the results at any level of effectiveness rather than being applicable only at certain levels. At this point, the model seems most in need of, first, a standard means of assessing the effectiveness of a given therapist behavior, and then, further research under varied conditions in order to confirm its value as a means of understanding the relationship between the verbal and nonverbal communications of a therapist.

References

Carkhuff, R. R. Helping and Human Relations. New York: Holt, Rinehart, and Winston, 1967.

Graves, J. R., & Robinson, J. D. Proxemic behavior as a function of inconsistent verbal and nonverbal messages. Journal of Counseling Psychology, 1976, 23, 333-338.

Haase, R. F. & Tepper, D. T. Nonverbal components of empathic communication. Journal of Counseling Psychology, 1972, 19, 417-424.

Lee, D. Y., Zingle, H. W., Patterson, J. G., Ivey, A. E., & Haase, R. F. Development and validation of a microcounseling skill discrimination scale. Journal of Counseling Psychology, 1976, 23, 468-472.

Shapiro, J. G. Relationships between visual and auditory cues of therapeutic effectiveness. Journal of Clinical Psychology, 1968, 24, 237-239.

Shapiro, J. G., Foster, C. P., & Powell, T. Facial and bodily cues of genuineness, empathy, and warmth. Journal of Clinical Psychology, 1968, 24, 233-236.

Truax, C. B. & Carkhuff, R. R. Toward Effective Counseling and Psychotherapy. Chicago: Aldine, 1967.

Williams, E. J. Experimental designs balanced for the estimation of residual effects of treatments. Australian Journal of Scientific Research, 1949, 2, 149-168.

Footnote

This study is based on a Masters thesis submitted by the first author to the Department of Psychology, Memphis State University. Requests for reprints should be sent to Dr. Robert Bloom, Department of Psychology, Memphis State University, Memphis, Tennessee, 38152. A version of this paper was presented at the 86th Annual Convention of the American Psychological Association, Toronto, August 28, 1978.

Table 1

Matrix of Condition Combinations

		Verbal Effectivenss		
		Low	Medium	High
Nonverbal Effectiveness	Low	(11)	(21)	(31)
	Medium	(12)	(22)	(32)
	High	(13)	(23)	(33)

TABLE 2

Means and Standard Deviations of Ratings of Therapeutic Effectiveness for Each Dependent Measure

		Verbal Communication of Therapeutic Effectiveness		
		Low	Medium	High
Nonverbal Communication of Therapeutic Effectiveness	LOW	(1) 1.59/ .856 (2) 1.77/ .979 (3) 1.75/ .710 (4) 1.85/1.088	(1) 1.58/ .773 (2) 1.90/1.015 (3) 1.84/ .825 (4) 2.22/1.296	(1) 1.97/ .868 (2) 2.39/1.148 (3) 2.33/1.051 (4) 2.84/1.385
	MEDIUM	(1) 2.52/1.055 (2) 2.89/1.220 (3) 2.50/ .967 (4) 3.24/1.568	(1) 3.04/ .885 (2) 3.52/ .904 (3) 3.04/1.028 (4) 4.33/1.464	(1) 3.26/ .959 (2) 3.68/ .920 (3) 3.58/1.061 (4) 4.72/1.498
	HIGH	(1) 2.53/ .915 (2) 2.88/1.207 (3) 2.38/ .990 (4) 3.24/1.585	(1) 3.18/ .797 (2) 3.70/ .764 (3) 3.31/ .960 (4) 4.60/1.388	(1) 3.61/ .992 (2) 3.90/ .863 (3) 3.92/1.016 (4) 5.13/1.391

Dependent Measure (1) = Communication of Respect
Dependent Measure (2) = Facilitative Genuineness
Dependent Measure (3) = Empathic Understanding
Dependent Measure (4) = Overall Effectiveness

Mean/Standard Deviation

TABLE 3

Results of One-tailed t-tests on Predicted Differences Between Cell Means

Cells Compared	t	Probability
33/22	(1) 4.332	(1) **
	(2) 3.556	(2) **
	(3) 6.147	(3) **
	(4) 4.001	(4) **
22/11	(1)11.897	(1) **
	(2)13.257	(2) **
	(3)10.428	(3) **
	(4)13.730	(4) **
32/22	(1) 1.703	(1) N.S.
	(2) 1.253	(2) N.S.
	(3) 3.691	(3) **
	(4) 1.881	(4) N.S.
23/22	(1) 1.188	(1) N.S.
	(2) 1.535	(2) N.S.
	(3) 1.939	(3) N.S.
	(4) 1.352	(4) N.S.
23/32	(1) 0.648	(1) N.S.
	(2) 0.169	(2) N.S.
	(3) 1.906	(3) N.S.
	(4) 0.593	(4) N.S.
33/31	(1)12.564	(1) **
	(2)11.045	(2) **
	(3)11.262	(3) **
	(4)11.784	(4) **
33/13	(1) 8.083	(1) **
	(2) 8.259	(2) **
	(3)10.908	(3) **
	(4) 9.051	(4) **

TABLE 3 - continued

Results of One-tailed t-tests on Predicted Differences Between Cell Means

Cells Compared	t	Probability
33/11	(1)15.574	(1) **
	(2)16.949	(2) **
	(3)17.678	(3) **
	(4)18.757	(4) **
31/11	(1) 3.148	(1) *
	(2) 4.151	(2) **
	(3) 4.619	(3) **
	(4) 5.678	(4) **
13/11	(1) 7.577	(1) **
	(2) 7.213	(2) **
	(3) 5.221	(3) **
	(4) 7.301	(4) **
13/31	(1) 4.483	(1) **
	(2) 2.972	(2) *
	(3) 0.350	(3) N.S.
	(4) 1.919	(4) N.S.
22/31	(1) 8.717	(1) **
	(2) 7.810	(2) **
	(3) 4.877	(3) **
	(4) 7.468	(4) **
22/13	(1) 4.126	(1) **
	(2) 4.285	(2) **
	(3) 4.669	(3) **
	(4) 5.101	(4) **

*p < .01
**p < .001
(1) Dependent Measure 1 = Communication of Respect
(2) Dependent Measure 2 = Facilitative Genuineness
(3) Dependent Measure 3 = Empathic Understanding
(4) Dependent Measure 4 = Overall Effectiveness

TABLE 4

Predicted Values Resulting From an Additive Model

	Verbal Communication of Therapeutic Effectiveness		
	Low	Medium	High
Nonverbal Communication of Therapeutic Effectiveness			
Low	0	2	3
Medium	2	4	5
High	3	5	6

Assigned Value of Low Effectiveness Condition = 0

Assigned Value of Medium Effectiveness Condition = 2

Assigned Value of High Effectiveness Condition = 3